

Title (en)  
Semiconductor device and electronic device

Title (de)  
Halbleitergerät und elektronisches Gerät

Title (fr)  
Dispositif semi-conducteur et dispositif électronique

Publication  
**EP 2521259 A3 20131030 (EN)**

Application  
**EP 12002997 A 20120427**

Priority  
JP 2011103529 A 20110506

Abstract (en)  
[origin: EP2521259A2] A semiconductor device including: an FET; a MOSFET having a drain thereof connected with a source of the FET; a resistor having one end thereof connected with a gate of the FET and having the other end thereof connected with a source of the MOSFET; and a diode having an anode thereof connected with the gate of the FET and having a cathode thereof connected with the source of the MOSFET.

IPC 8 full level  
**H03F 1/22** (2006.01); **H03K 17/10** (2006.01); **H03K 17/16** (2006.01); **H03K 17/567** (2006.01)

CPC (source: EP US)  
**H01L 29/74** (2013.01 - US); **H03K 17/107** (2013.01 - EP US); **H03K 17/168** (2013.01 - EP US); **H03K 17/567** (2013.01 - EP US)

Citation (search report)

- [XI] US 2005225373 A1 20051013 - MORITA KOICHI [JP]
- [XI] WO 2010108292 A2 20100930 - ETH ZUERICH [CH], et al
- [XA] US 6633195 B2 20031014 - BAUDELOT ERIC [DE], et al
- [A] AGGELER D ET AL: "Controllable dI/dt behaviour of the SiC MOSFET/JFET cascode an alternative hard commutated switch for telecom applications", APPLIED POWER ELECTRONICS CONFERENCE AND EXPOSITION (APEC), 2010 TWENTY-FIFTH ANNUAL IEEE, IEEE, PISCATAWAY, NJ, USA, 21 February 2010 (2010-02-21), pages 1584 - 1590, XP031649643, ISBN: 978-1-4244-4782-4
- [A] BIELA J ET AL: "Balancing circuit for a 5kV/50ns pulsed power switch based on SiC-JFET Super Cascode", PULSED POWER CONFERENCE, 2009. PPC '09. IEEE, IEEE, PISCATAWAY, NJ, USA, 28 June 2009 (2009-06-28), pages 635 - 640, XP031615057, ISBN: 978-1-4244-4064-1

Cited by

EP2782134A3; GB2512261A; GB2512261B; US9400513B2; US9972619B2; WO2013113771A1; US8866253B2; US9530764B2; US8970262B2; US9431382B2; US9653449B2

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)

**EP 2521259 A2 20121107; EP 2521259 A3 20131030; EP 2521259 B1 20190612;** CN 102769451 A 20121107; CN 102769451 B 20141126; JP 2012235378 A 20121129; JP 5290354 B2 20130918; US 2012280271 A1 20121108; US 2014167100 A1 20140619; US 8710543 B2 20140429

DOCDB simple family (application)

**EP 12002997 A 20120427;** CN 201210134341 A 20120502; JP 2011103529 A 20110506; US 201213459993 A 20120430; US 201414187785 A 20140224